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## A New Species of *Tibouchina* (Melastomataceae) from Minas Gerais, Brazil

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**ABSTRACT.** The new species *Tibouchina rubrobracteata* belongs to section *Pleroma* D. Don. It is distinguished from related species by the presence of larger bracteoles than those usually found in section *Pleroma*, glabrous staminal filaments and style, the hypanthium not constricted at the apex, and a globose fruit. This species occurs in highland “campo rupestre” vegetation in the Serra da Canastra National Park in the state of Minas Gerais, an important center of endemism in Brazil.

**RESUMO.** A espécie nova *Tibouchina rubrobracteata* pertence à seção *Pleroma* D. Don. É distinta das espécies próximas pela presença de bractéolas maiores que o usualmente encontrado na seção *Pleroma*, filetes e estilete glabros, hipanto não constricto no ápice e fruto globoso. Esta espécie ocorre nos campos rupestres do Parque Nacional da Serra da Canastra, no estado de Minas Gerais, um importante centro de endemismo.

**Key words:** Brazil, campo rupestre, endemic, highland vegetation, Melastomataceae, Minas Gerais, *Tibouchina*.

The region of Serra da Canastra is located in the Cerrados domain and contains many endemic species in different families (Romero & Nakajima, 1999). The vegetation of the region is composed of forests, including gallery forests that occur along creeks and rivers as well as small patches of cloud and montane forests, savanna with different physiognomic types, and campos rupestres, a mainly shrubby vegetation of rocky outcrops. This new species of *Tibouchina* was discovered during the floristic survey carried out by Herbarium Uberlandense (HUFU) from the Universidade Federal of Uberlândia in the Serra da Canastra National Park, southwestern Minas Gerais state, Brazil.

***Tibouchina rubrobracteata*** R. Romero & P. J. F. Guimarães, sp. nov. TYPE: Brazil. Minas Gerais: São Roque de Minas, Par. Nac. Serra da Canastra, estrada para o sítio João Domingos, Serra da Canastra, afloramentos rochosos, 46°15'–47°00'W, 20°00'–20°30'S, 26 May 1996, J. N. Nakajima & R. Romero 1807 (holotype, HUFU; isotypes, K, MO, RB, UEC, US). Figure 1A–F.

Frutex 0.4–1 m altus. Laminae ovado-oblongae, apice acuto, base rotundata, margine integro, supra et subtus sericeo, 5–7 nervis. Thyrsus 7–12 cm longus, 5–9 flores; 2-bracteolae concavae, 11.0–12.0 × 12.0–14.0 mm; flores 5-meri, pedicellati; hypanthium campanulatum; calyces lobis 6–8 × 3–4 mm, in fructu non persistentibus; 10 stamina, filamenta glabra; ovarium 5-loculare, apice sericeo-glanduloso; stylus glaber. Capsula globosa.

Shrub, 0.4–1 m tall, the stem, branches, petioles, leaves, inflorescence, bracteoles, and hypanthium densely covered with glandular hairs; branches quadrangular. Petioles 1.2–3.3 cm long; leaf blade 6.0–10.0 × 3.0–5.3 cm, ovate-oblong, apex acute, base rounded, margin entire, above sericeous, covered with eglandular and some glandular hairs, below sericeous, covered with glandular and eglandular hairs, 5- to 7-nerved, with inconspicuous lateral veins, confluent in the base. Thyrses terminal, 5 to 9 flowers, 7.0–12.0 cm long; bracteoles 2, 11.0–12.0 × 12.0–14.0 mm, red, asymmetrical, concave, outer surface densely covered with glandular hairs, caducous later. Flowers 5-merous, pedicellate, pedicels 1.8–3.0 mm long; hypanthium 5.5–8.5 × 6–8.0 mm, campanulate, not constricted at the apex; calyx lobes 6–8 × 3–4 mm, caducous in the fruit, triangular, apex acute, outer surface densely covered with glandular hairs, mainly on the lobe base, sometimes between the lobes with a glandular hair longer than the others; petals purple, 15.0–17.0 × 10.0–16.0 mm, obovate, apex rounded, glandular-ciliate, with an apical glandular hair

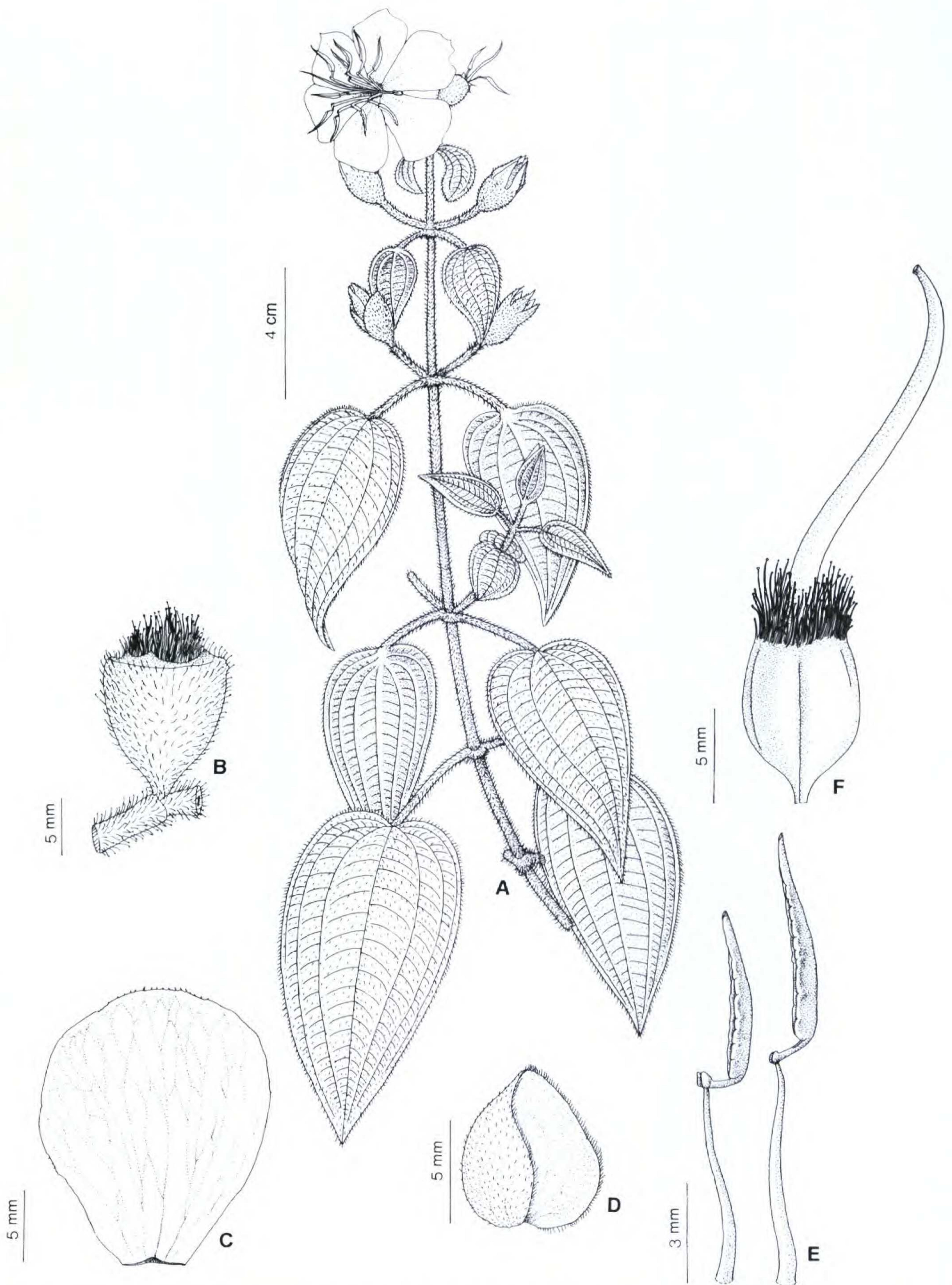


Figure 1. *Tibouchina rubrobracteata* R. Romero & P. J. F. Guimarães. —A. Habit. —B. Fruit. —C. Petal. —D. Bracteole. —E. Lateral view of stamens. —F. Ovary and style. Drawn from the holotype, Nakajima & Romero 1807 (HUFU).

longer; stamens 10, subisomorphic; filaments 7.0–8.5 mm long, glabrous; anthers 7.0–8.0 mm long, subulate, apex attenuate, connective prolonged 1.7–2.2 mm below the thecae, with ventral bilobed appendage; ovary superior, 5-locular, free apical portion densely covered with glandular hairs; style 14.0–15.0 mm long, filiform, glabrous, stigma truncate. Capsule 6.7–7.8 × 6.3–7.0 mm, globose; seeds 0.5–0.7 × ca. 0.5 mm, numerous, cochleate, tuberculate.

*Tibouchina rubrobracteata* has 5-merous flowers in a thyrsoid inflorescence, two conspicuous bracteoles 11–12 × 12–14 mm, caducous, calyx lobes caducous in the fruit, and subulate anthers with attenuate apex. These characters refer *T. rubrobracteata* to section *Pleroma*, but the sectional limits in *Tibouchina* are weak since most sections reflect previously recognized genera, and they are not monophyletic clades on the basis of morphological characters.

The 11–12 × 12–14 mm bracteoles, a hypanthium not constricted at the apex, the capsule globose, as well as the filaments and style glabrous, distinguish *T. rubrobracteata* from *T. carvalhoi* Wurdack, to which it is most closely related. The latter differs in having smaller bracteoles, 2–5 × 0.7–0.75 mm, a hypanthium constricted at the apex, which is best observed during the development of the fruit, the capsule elongated, and the filaments and style with glandular hairs in the basal portion. *Tibouchina carvalhoi* is apparently endemic to Chapada Diamantina, Bahia state, Brazil. Wurdack (1983) related *T. carvalhoi* with *T. clidemioides* Cogniaux. We have examined the syntypes of *T. clidemioides* (in G and K) and can verify that the bracteoles are elongate (7–12 mm long), but much more narrow (2–3 mm), and the calyx lobes are also very narrow and, as in *T. carvalhoi*, the filaments and style have glandular hairs toward the base. According to Cogniaux (1883–1885), the type collection is from Vitória, Espírito Santo state, in eastern Brazil. These three species are strongly related by the indumentum of the branches, leaves, and shape of the inflorescence.

*Tibouchina rubrobracteata* is endemic to the region of Serra da Canastra, Minas Gerais, Brazil, on

rocky slopes. This species flowers from April to August, and fruits from May to July.

The specific epithet refers to the characteristically red color of the bracteoles. This red coloration frequently can also be seen in the inflorescence, pedicels, hypanthium, and calyx lobes of *Tibouchina rubrobracteata*.

*Paratypes.* BRAZIL. **Minas Gerais:** São Roque de Minas, Par. Nac. Serra da Canastra, paredão da Cachoeira Casca d'Anta, 20 Apr. 1994, R. Romero, J. N. Nakajima & F. A. G. Guilherme 959 (HUFU); paredão da Cachoeira Casca d'Anta, 22 Ago. 1994, R. Romero, J. N. Nakajima & D. G. Simão 1151 (ESA, HUFU, SP); 3 km da sede administrativa, 10 May 1995, J. N. Nakajima, R. Romero, M. B. Alcantara & C. A. Prado 1012 (HUFU, K), 15 May 1995, J. N. Nakajima, R. Romero & M. B. Alcantara 1107 (C, HUFU), 15 July 1995, J. N. Nakajima, R. Romero, M. A. Farinaccio & V. F. O. Miranda 2395 (HUFU, MBM, SPF); Cachoeira Casca d'Anta, 12 May 1995, J. N. Nakajima, R. Romero, M. B. Alcantara & C. A. Prado 1050 (BHC, HUFU, R); Cachoeira Casca d'Anta, 10 July 1996, J. N. Nakajima, K. Ressel & F. A. G. Guimarães 1946 (HUFU, NY); Garagem de Pedras, 11 July 1996, J. N. Nakajima, K. Ressel & F. A. G. Guimarães 2002 (HUFU, VIC); Delfinópolis, estrada da represa dos Peixotos, 22 May 1996, R. Romero & J. N. Nakajima 3419 (HUFU, NY, RB, UEC, US).

*Acknowledgments.* The first author is grateful to the Universidade Federal de Uberlândia for the facilities of HUFU, the Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (IBAMA) for permission to collect at Serra da Canastra National Park, Wagner Moreira Lima, former director of Serra da Canastra National Park, for logistical and facilities support, and the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq Grant N° 300918/93-3) for a research grant. Fieldwork for this study had financial support from the Diretoria de Pesquisa from the Universidade Federal de Uberlândia. The authors thank Peter Gibbs for helpful corrections and Eduardo Kickhöfel for preparing the illustration.

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